

# 1.3 Order of Operations

EQ: In what order do you evaluate numerical expressions?

Evaluate: find the value

Numerical Expression: an expression that contains only numbers and operations.

Grouping (parenthesis brackets)	G
Exponents	E
Multiplication/Division	M
Subtraction/Addition	S

Left to Right (L → R) for Multiplication/Division and Subtraction/Addition.

Example 1: Evaluate.

$$12 - 2 \times 4$$
$$12 - 8$$
$$\boxed{4}$$

Example 2: Evaluate.

$$30 \div (7 + 2^3) \times 6$$
$$30 \div (7 + 8) \times 6$$
$$30 \div 15 \times 6$$
$$2 \times 6$$
$$\boxed{12}$$

$2 \times 2 \times 2$   
 $\underline{4} \times 2 = 8$

★ Re-write the problem after each step

Summary: